

**PATENT APPLICATION**  
**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**  
**BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

In re application of

Docket No: Q65952

Nobuhiko OGURA

Appln. No.: 09/944,175

Group Art Unit: 1639

Confirmation No.: 9850

Examiner: Christopher M. GROSS

Filed: September 4, 2001

For: BIOCHEMICAL ANALYZING METHOD, BIOCHEMICAL ANALYSIS APPARATUS,  
BIOCHEMICAL ANALYSIS UNIT USED THEREFOR AND TARGET DETECTING  
APPARATUS FOR DETECTING TARGET FROM BIOCHEMICAL ANALYSIS UNIT

**RESPONSE TO NOTIFICATION OF NON-COMPLIANT**  
**APPEAL BRIEF UNDER 37 C.F.R. § 41.37**

**MAIL STOP APPEAL BRIEF - PATENTS**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

In response to the Notification of Non-Compliant Appeal Brief of November 20, 2007  
and in accordance with the provisions of 37 C.F.R. § 41.37, Appellant submits the following:

**Table of Contents**

STATUS OF CLAIMS.....	2
CLAIMS APPENDIX.....	3

### **III. STATUS OF CLAIMS**

Claims 1, 2, 4-8 and 10-22 are pending in the application. Claims 3 and 9 are cancelled. Claims 1, 2, 4-8 and 10-22 are rejected (*see* Office Action dated February 13, 2007). **Claims 1, 2, 4-8 and 10-22 are on appeal** (*see* attached Claims Appendix).

## **CLAIMS APPENDIX**

### **CLAIMS 1, 2, 4-8 and 10-22 ARE ON APPEAL**

1. A biochemical analyzing method comprising the steps of  
fixing probes selected in advance on a substrate;  
binding a target with at least one of the probes using a specific binding reaction to capture the target;  
fractionating a combined body of the probe, the captured target and a substance derived from a living organism other than the captured target which is bound with the probe due to a similarity in structure;  
detecting only a fractionated target; and  
quantitatively analyzing the detected target, wherein the probes are spotted on the substrate and fixed thereon, and the combined body of the probe, the captured target and the substance derived from a living organism other than the target is electrophoresed, thereby being fractionated,  
wherein during the fractionating, the combined body of the probe and the captured target and the substance derived from a living organism other than the target is separated into a plurality of fractions based on molecular weight.
2. The biochemical analyzing method in accordance with Claim 1, wherein the target is bound with the at least one probe using hybridization.
3. (canceled).
4. The biochemical analyzing method in accordance with Claim 1, wherein the combined body of the probe, the captured target and the substance derived from a living organism other

than the target is electrophoresed in a direction at an angle with the surface of the substrate, thereby being fractionated.

5. The biochemical analyzing method in accordance with Claim 4, wherein the combined body of the probe, the captured target and the substance derived from a living organism other than the target is electrophoresed in gel adjacent and in contact with the substrate, thereby being fractionated.

6. The biochemical analyzing method in accordance with Claim 5, wherein the combined body of the probe, the captured target and the substance derived from a living organism other than the target is electrophoresed in a block of gel adjacent to the substrate, thereby being fractionated.

7. The biochemical analyzing method in accordance with Claim 4, wherein the combined body of the probe, the captured target and the substance derived from a living organism other than the target is electrophoresed in a plurality of capillaries adjacent to and in contact with the substrate, thereby being fractionated.

8. The biochemical analyzing method in accordance with Claim 7, wherein the plurality of capillaries are filled with a material capable of forming a membrane filter or a gel.

9. (canceled).

10. The biochemical analyzing method in accordance with Claim 1, wherein the probes are one-dimensionally spotted on the substrate to form a plurality of spots and are fixed thereon.

11. The biochemical analyzing method in accordance with Claim 1, wherein the probes are two-dimensionally spotted on the substrate to form a plurality of spots and are fixed thereon.

12. The biochemical analyzing method in accordance with Claim 1, wherein the target consists of a gene.

13. The biochemical analyzing method in accordance with Claim 1 which further comprises a step of labeling the target with a fluorescent substance.

14. The biochemical analyzing method in accordance with Claim 13, wherein the target is labeled with the fluorescent substance prior to binding the target with the probes.

15. The biochemical analyzing method in accordance with Claim 13, wherein the combined body of the captured target, the probe and the substance derived from a living organism other than the target is labeled with the fluorescent substance after the combined body of the probe, the captured target and the substance derived from a living organism other than the target is fractionated.

16. The biochemical analyzing method in accordance with Claim 1 which further comprises a step of labeling the target with a labeling substance which generates chemiluminescent emission when it contacts a chemiluminescent substrate.

17. The biochemical analyzing method in accordance with Claim 16, wherein the step of labeling occurs prior to said binding step.

18. The biochemical analyzing method in accordance with Claim 16, wherein the step of labeling occurs after the fractionating step.

19. The biochemical analyzing method in accordance with Claim 10, wherein the fractionated targets are two-dimensionally scanned and light released from the targets is detected, thereby performing quantitative analysis.

20. The biochemical analyzing method in accordance with Claim 10, wherein light released from the fractionated targets is detected using an area sensor and quantitative analysis is performed.

21. The biochemical analyzing method in accordance with Claim 11, wherein the fractionated targets are three-dimensionally scanned and light released from the targets is detected, thereby performing quantitative analysis.

22. The biochemical analyzing method in accordance with Claim 1, wherein targets electrophoresed to positions in accordance with the kinds of the targets are quantified and analyzed.

No fee is believed due; if necessary, however, please charge any necessary fee to Deposit Account No. 19-4880.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

/Chidambaram.S.Iyer/

SUGHRUE MION, PLLC  
Telephone: (202) 293-7060  
Facsimile: (202) 293-7860

---

Chid S. Iyer  
Registration No. 43,355

WASHINGTON OFFICE

**23373**

CUSTOMER NUMBER

Date: December 20, 2007